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EXAMINER	
TANG, KUO LIANG J	

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/037,199	RUBIN, BRADLEY SCOTT	
	Examiner	Art Unit	
	Kuo-Liang J Tang	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the application filed on 1/4/2002.

The priority date for this application is 4/30/1996.

Claims 1-23 are pending and have been examined.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 8 and (17-20) are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 9 and 27 of US Patent No. 5,778,378 (hereinafter '378) respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following observation.

Instant Claim	'378 Claim
1. An apparatus comprising: at least one processor;	1. A computer system comprising: a central processing unit; a user interface; and
a memory coupled to the at least	a main memory having an operating system

one processor;	that supports an object oriented programming environment containing
a user-**extensible** object oriented framework residing in the memory, the framework including at least one core function that cannot be modified by a user and at least one **extensible** function defined by a user to customize the framework and thereby define a desired information retrieval system, the framework including:	a framework that provides an **extensible** information retrieval system that operates on documents stored in the computer system, the framework including:
a load document processor that loads and preprocesses a plurality of documents;	**index** class objects having **word index** objects that map words contained in the stored documents to the documents that contain the words;
an **index** processor that creates at least one **word index** corresponding to the plurality of documents; and	a build **index** object that responds to a user build **index** request by processing a stored document and creating the **word index** objects such that they contain the document word mapping and document-related information produced by a preprocessing operation;
	a posting list class of objects that are pointed to by the word **index** objects and contain a frequency count that indicates the

	number of times a word appears in a word **index** object of a document; a document table class of objects that map a word **index** object to the indexed document from which it was preprocessed; and
a **query** processor that receives a query and determines if any of the plurality of documents match the query by processing the query and comparing the processed query to the plurality of words in the at least one word index, thereby providing a query result.	a **query index** object that processes a user query so as to produce a query result from comparison of the user query and the word **index** objects in response to a user query; wherein the query result identifies stored documents relevant to the user query.
8. A program product comprising: (A) a user-**extensible object oriented framework** mechanism comprising: (1) a load document processor that loads and preprocesses a plurality of **documents**;	9. An **object oriented framework** for use in a computer system having an operating system that supports an object oriented programming environment, wherein the framework provides an **extensible** information retrieval system that operates on documents stored in the computer

	system and includes: **index** class objects having word **index** objects that map words contained in the stored **documents** to the documents that contain the words; a build **index** object that responds to a user build index request by processing a stored document and creating the word index objects such that they contain the document word mapping and document-related information produced by a preprocessing operation; a posting list class of objects that are pointed to by the word index objects and contain a frequency count that indicates the number of times a word appears in a word index object of a document; a document table class of objects that map a word index object to the indexed document from which it was preprocessed; and
(2) an **index** processor that creates at least one word index corresponding to the plurality of documents; and	

(3) a **query** processor that receives a query and determines if any of the plurality of documents match the query by processing the query and comparing the processed query to the plurality of words in the at least one word index, thereby providing a query result; and (B) computer-readable signal bearing media bearing the framework mechanism.	a **query** index object that processes a user query so as to produce a query result from comparison of the user query and the word index objects in response to a user query; wherein the query result identifies stored documents relevant to the user query.
17. A method of retrieving information from a plurality of documents comprising the steps of: (1) providing a user-**extensible** object	27. A method of executing an application program in a computer system having a central processing unit that controls processing in the computer system, a user interface, and a main memory having an operating system that supports an object oriented programming environment, the method comprising the steps of: providing an object oriented framework

oriented framework mechanism;	that provides an **extensible** information retrieval system; and
(2) extending the object oriented framework mechanism; and	evaluating a user query by using the framework to compare information contained in the user query with
(3) executing the extended object oriented framework mechanism, the executing framework mechanism performing the steps of: (A) loading and preprocessing a plurality of documents; (B) **creating** at least one word index corresponding to the plurality of documents; and (C) receiving a query and determining if any of the plurality of documents match the query by processing the query and comparing the processed query to the plurality of words in the at least one word index, thereby providing a query result.	information contained in object oriented programming, **extensible** index class objects of the framework having word index objects that map words contained in the stored documents to the documents that contain the words, wherein the framework further includes:

18. wherein the framework mechanism performs step (B) in response to a **build index request from a user.**	a build index object that responds to a **user build index request** by processing a stored document and **creating** the word index objects such that they contain the document word mapping and document-related information produced by a preprocessing operation;
19. wherein the executing framework mechanism further preforms the step of counting the number of times a word appears in the at least one **word index**.	a posting list class of objects that are pointed to by the **word index** objects and contain a frequency count that indicates the number of times a word appears in a word index object of a document;
20. wherein the executing framework mechanism further performs the step of **mapping a word index** to the **indexed document** from which it was preprocessed	a document table class of objects that **map a word index** object to the **indexed document** from which it was preprocessed; and a query index object that processes a user query so as to produce a query result from

	comparison of the user query and the word index objects in response to a user query; a build index object that responds to a user build index request by processing a stored document and creating the word index objects such that they contain the document word mapping and document-related information produced by a preprocessing operation; a posting list class of objects that are pointed to by the word index objects and contain a frequency count that indicates the number of times a word appears in a word index object of a document; a document table class of objects that map a word index object to the indexed document from which it was preprocessed; and

	a query index object that processes a user query so as to produce a query result from comparison of the user query and the word index objects in response to a user query; wherein the query result identifies stored documents relevant to the user query.

The limitations recited in claim 1 are obvious variations of limitation in '378 Claims 1.

The limitations recited in claim 8 are obvious variations of limitation in '378 Claim 9.

The limitations recited in claims 17-20 are obvious variations of limitation in '378 Claim 27.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al., US Patent No. 6,081,798 (hereinafter Johnson).

As Per Claim 1, Johnson teaches a framework for use with object-oriented programming systems provides a case-based reasoning (CBR) system shell that permits a framework user to develop a case base having case histories and generates a case-based reasoning system that receives user requests for query solutions and produces a query solution that can be incorporated into the case base. (E.g. see Abstract and associated text). In that Johnson discloses the method that covering the steps of an apparatus comprising:

"at least one processor" (E.g. see FIG. 8, CPU 32 and associated text);

"a memory coupled to the at least one processor" (E.g. see FIG. 8, Main Memory 38 and associated text);

"a user-extensible object oriented framework (E.g. see col. 6:50-67, framework) residing in the memory, the framework including at least one core function (E.g. see col. 6:50-67, core function) that cannot be modified by a user and at least one extensible function (E.g. see col. 6:50-67, extensible function) defined by a user to customize the framework and thereby define a desired information retrieval system (E.g. see col. 2:56 to col. 3:13), the framework including: a load document processor that loads and preprocesses a plurality of documents" (E.g. see col. 2:56 to col. 3:13, col. 7:2-31 and col. 63:63 to col. 64:10);

"an index processor that creates at least one word index corresponding to the plurality of documents" (E.g. see col. 64:29-34, "index definition class of objects" and col. 51:30-65, "IndexDefinition objects" and col. 16:50-67); and

"a query processor (E.g. see col. 2:56 to col. 3:13, "query processing") that receives a query and determines if any of the plurality of documents match the query by processing the query and comparing the processed query to the plurality of words in the at least one word index, thereby providing a query result" (E.g. see col. 64:34-43).

As Per claim 2, the rejection of claim 1 is incorporated and further Johnson teaches:

"wherein the index processor creates at least one word index in response to a build index request from a user" (E.g. see col. 64:29-34, "index definition class of objects" and col. 51:30-65, "IndexDefinition objects" and col. 16:50-67).

As Per claim 3, the rejection of claim 1 is incorporated and further Johnson teaches:

"wherein the framework further includes: a frequency counter that indicates the number of times a word appears in the at least one word index" (E.g. see col. 64:29-34, "index definition class of objects" and col. 51:30-65, "IndexDefinition objects" and col. 16:50-67).

As Per claim 4, the rejection of claim 1 is incorporated and further Johnson teaches:

"a table that maps a word index to the indexed document from which it was preprocessed" (E.g. see 64:29-34, "index definition class of objects" and col. 51:30-65, "IndexDefinition objects" and col. 16:50-67).

As Per claim 5, the rejection of claim 1 is incorporated and further Johnson teaches:

"wherein the preprocessing by the load document processor includes a parsing method that identifies text words from other text characters" (E.g. see FIG. 8&36 and associated text).

As Per claim 6, the rejection of claim 1 is incorporated and further Johnson teaches:

"wherein the preprocessing by the load document processor includes a stoplist method that 1) identifies text words not containing sufficient information to be useful in providing a query result and 2) deletes such text words" (E.g. see col. 66:14-61).

As Per claim 7, the rejection of claim 1 is incorporated and further Johnson teaches:

"wherein the preprocessing by the load document processor includes a stemming method that 1) identifies text word stems of which a text word is a formative, and 2) replaces the text word with the stem" (E.g. see col. 66:14-61).

As Per claim 8, Johnson teaches a program product comprising:

"(A) a user-extensible object oriented framework (E.g. see col. 6:50-67, framework) mechanism comprising:

(1) a load document processor that loads and preprocesses a plurality of documents (E.g. see col. 2:56 to col. 3:13 and col. 2:56 to col. 3:13, col. 7:2-31 and col. 63:63 to col. 64:10);

(2) an index processor that creates at least one word index corresponding to the plurality of documents (E.g. see col. 64:29-34, "index definition class of objects" and col. 51:30-65, "IndexDefinition objects" and col. 16:50-67); and

(3) a query processor (E.g. see col. 2:56 to col. 3:13, "query processing") that receives a query and determines if any of the plurality of documents match the query by processing the query and comparing the processed query to the plurality of words in the at least one word index, thereby providing a query result" (E.g. see col. 64:34-43); and "(B) computer-readable signal bearing media bearing the framework mechanism" (E.g. see col. 14:43-56).

As Per claim 9, the rejection of claim 8 is incorporated and further Johnson teaches: "wherein the computer-readable signal bearing media comprises recordable media" (E.g. see col. 14:43-56).

As Per claim 10, the rejection of claim 8 is incorporated and further Johnson teaches: "wherein the computer-readable signal bearing media comprises transmission media" (E.g. see col. 14:43-56).

As Per claim 11, the rejection of claim 8 is incorporated and further Johnson teaches: "wherein the index processor creates at least one word index in response to a build index request from a user" (E.g. see ABSTRACT and col. 64:29-34, "index definition class of objects" and col. 51:30-65, "IndexDefinition objects" and col. 16:50-67).

As Per claim 12, the rejection of claim 8 is incorporated and further Johnson teaches:

"wherein the framework mechanism further includes: a frequency counter that indicates the number of times a word appears in the at least one word index" (E.g. see col. 34:40-56 and col. 36:10-16).

As per Claims 13-16, the rejection of claim 8 are incorporated and are rejected under the same reason set forth in connection of the rejection of claims 4-7 respectfully.

As Per claim 17, Johnson teaches a method of retrieving information from a plurality of documents comprising the steps of:

"(1) providing a user-extensible object oriented framework mechanism" (E.g. see col. 6:50-67, framework);

"(2) extending the object oriented framework mechanism" (E.g. see col. 6:50-67, framework and see col. 6:50-67, extensible function); and

"(3) executing the extended object oriented framework mechanism, the executing framework mechanism performing the steps of:

(A) loading and preprocessing a plurality of documents (E.g. see col. 2:56 to col. 3:13, col. 7:2-31 and col. 63:63 to col. 64:10);

(B) creating at least one word index corresponding to the plurality of documents (E.g. see 64:29-34, "index definition class of objects" and col. 51:30-65, "IndexDefinition objects" and col. 16:50-67); and

(C) receiving a query and determining if any of the plurality of documents match the query by processing the query and comparing the processed query to the plurality of

words in the at least one word index, thereby providing a query result" (E.g. see col. 2:56 to col. 3:13, "query processing" and see col. 64:34-43).

As per Claims 18-20, the rejection of claim 17 are incorporated and are rejected under the same reason set forth in connection of the rejection of claims 11-13 respectfully.

As per Claims 21-23, the rejection of claim 17 are incorporated and are rejected under the same reason set forth in connection of the rejection of claims 4-7 respectfully.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang J Tang whose telephone number is (571) 272-3705. The examiner can normally be reached on 8:30AM - 7:00PM (Monday – Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kuo-Liang J. Tang

Software Engineer Patent Examiner

TUAN DAM
SUPERVISORY PATENT EXAMINER